

PTO-1449

SEP 17 2004

**Information Disclosure Citation
in an Application**

Application No.

10/669,105

Applicant(s)

Goldman et al.

Docket Number

074263.0170

Group Art Unit

3672

Filing Date

September 23, 2003

U.S. PATENT DOCUMENTS

	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
A.	3752966	8/14/73	Foy et al.	175	40	5/28/71
B.	5318136	6/7/94	Roswell et al.	175	24	3/6/91
C.	5415030	5/16/95	Jogi et al.	175	39	4/8/94
D.	5474142	12/12/95	Bowden	175	27	4/19/93
E.	6349595	2/26/02	Civolani et al.	73	152.02	9/27/00
F.	6516293	2/4/03	Huang et al.	703	10	3/13/00
G.	6785641	8/31/04	Huang	703	7	10/11/00

FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
H.	479866	8/5/75	SU	E21B	45/00		X
I.	983258	12/23/82	SU	E21B	44/00		X
J.	3207012	12/29/83	DE (w/abstract)	E21B	44/00		X
K.	2611804	2/27/87	FR (w/abstract)	E21B	44/00		X
L.	3704077	8/13/87	DE (w/abstract)	E21B	44/00		X
M.	1479630	5/15/89	SU	E21B	44/00		X
N.	1795220	2/15/93	SU	E21B	44/00		X
O.	1796769	2/23/93	SU	E21B	44/00		X
P.	2265923	10/13/93	GB	E21B	12/02	X	
Q.	1231946	11/27/95	SU	E21B	44/00		X
R.	2328467	2/24/99	GB	E21B	7/00	X	
S.	2354852	4/4/01	GB	E21B	49/00	X	
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NON-PATENT DOCUMENTS

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filed 9/23/2003

PTO-1449 Information Disclosure Citation in an Application			Application No.		Applicant(s)			
			Unassigned		William A. Goldman et al.			
			Docket Number		Group Art Unit		Filing Date	
			063718.0281		Unassigned		September 23, 2003	
U.S. PATENT DOCUMENTS								
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE	
<div style="font-size: 2em; font-family: cursive;">A</div>	A.	3593807	7/1971	Klima	173	6		
	B.	3742966	8/1973	Foy et al.	175	40		
	C.	3971449	7/1976	Nylund et al.	173	11		
	D.	4064749	12/1977	Pittman et al.	73	152		
	E.	4195699	4/1980	Rogers et al.	173	177		
	F.	4354233	10/1982	Zhukovsky et al.	173	6		
	G.	4407017	9/1983	Zhilikob et al.	173	6		
	H.	4627276	12/1986	Burgess et al.	175	39		
<div style="font-size: 2em; font-family: cursive;">I</div>	I.	4685329	8/1987	Burgess	175	39		
FOREIGN PATENT DOCUMENTS								
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
<div style="font-size: 2em; font-family: cursive;">J</div>	J.	0466255	1/1992	EP				
	K.	470593	8/1975	RU				
	L.	726295	4/1980	RU				
	M.	1716112	2/1992	RU				
NON-PATENT DOCUMENTS								
		DOCUMENT (Including Author, Title, Source, and Pertinent Pages)					DATE	
<div style="font-size: 2em; font-family: cursive;">N</div>	N.	E.M. Galle and H.B. Woods, "Best Constant Weight And Rotary Speed For Rotary Rock Bits", pp. 48-73, API Drilling and Production Practice,					1963	
	<div style="font-size: 2em; font-family: cursive;">O</div>	O.	R. Teale, "The Concept Of Specific Energy In Rock Drilling", p. 57-63, International Journal of Rock Mechanics, Mining Sciences, vol. 2, Great Britain					1965
		P.	Howell Word and Marvin Fisbeck, "Drilling Parameters And The Journal Bearing Carbide Bit", pp. 92-93, Drilling--DCW, Jan. 1980, first published Oct. 1979 in Tulsa, Oklahoma					Published Oct. 1979
		Q.	R.C. Pessier, M.J. Fear, "Quantifying Common Drilling Problems With Mechanical Specific Energy and A Bit-Specific Coefficient Of Sliding Friction", pp. 373-388, SPE Paper 24584, Washington, D.C					Published Oct. 1982
		R.	Michael A. Simpson, Sr., "Hand-Held Calculator Program Helps Optimize Drilling", pp. 97-101, World Oil					Apr. 1984
		S.	Kenneth L. Mason, "3-Cone Bit Selection With Sonic Logs", pp. 135-142, SPE Drilling Engineering, Jun. 1987, first published Sep. 1984 in Houston, Texas					Published Sep. 1984
<div style="font-size: 2em; font-family: cursive;">T</div>	T.	Allen D. Gault, "Measurement of Drilling Properties", pp. 143-148, SPE Drilling Engineer, Jun. 1987, published New Orleans, Louisiana, Mar. 1985					Mar. 1985	
EXAMINER <div style="font-size: 1.5em; font-family: cursive;">Dang</div>					DATE CONSIDERED <div style="font-size: 1.5em; font-family: cursive;">1/21/2005</div>			
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U.S. PATENT DOCUMENTS							
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
A. B. C. D. E. F. G. H. I.		4694686	9/1987	Fildes et al.	324	71	
		4793421	12/1988	Jasinski	173	11	
		4845628	7/1989	Gray et al.	702	9	
		4875530	10/1989	Frink et al.	175	27	
		4914591	4/1990	Warren et al.	175	40	
		4926686	5/1990	Fay	175	39	
		4981037	1/1991	Holbrook et al.	166	250	
		5010789	4/1991	Brett et al.	700	159	
		5012674	5/1991	Millheim et al.	324	201	
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	J.						
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NON-PATENT DOCUMENTS							
		DOCUMENT (Including Author, Title, Source, and Pertinent Pages)					DATE
M. N. O. P. Q.		T.M. Burgess, W.C. Lesso, "Measuring The Wear Of Milled Tooth Bits Using MWD Torque And Weight-On-Bit", SPE/IADC 13475, pp. 453-458 for pages illustration, published Mar. 1985, New Orleans, Louisiana					Published Mar. 1985
		Philip Holbrook, Michael Hauck, "Petrophysical--Mechanical Math Model Real-Time Wellsite Poor Pressure/Fracture Gradient Prediction", SPE Pub. No. 16666, published Sep. 1987 in Dallas, Texas					Published Sep. 1987
		E.C. Onyia, "Relationships between Formation Strength, Drilling Strength, and Electric Log Properties", pp. 605-618, SPE Drilling Engineering,					Oct., 1988
		David A. Glowka, "Use of Single-Cutter Data in the Analysis of PDC Bit Designs: Part I--Development of a PDC Cutting Force Model", pp. 797-849, JPT,					Aug. 1989
		David A. Glowka, "Use of Single-Cutter Data in the Analysis of PDC Bit Designs: Part II--Development of PDC WEAR Computer Code", pp. 850-859, JPT,					Aug. 1989
R.		E. Detournay, P. Defourny, "A Phenomenological Model for the Drilling Action of Drag Bits", pp. 13-23, International Journal of Rock Mechanics, Mineral Sciences and Geomechanical Abstracts, vol. 29, No. 1, printed in Great Britain.					1992
EXAMINER <i>Dan</i>					DATE CONSIDERED <i>1/21/2005</i>		
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<i>W</i>	A.	5216917	6/1993	Detournay	175	39	
	B.	5282384	2/1994	Holbrook	702	12	
	C.	5305836	4/1994	Holbrook et al.	175	26	
	D.	5415030	5/1995	Jogi et al.	175	39	
	E.	5442950	8/1995	Unalmiser et al.	73	152	
	F.	5449047	9/1995	Schivley, Jr.	173	11	
	G.	5458207	10/1995	Mattero	173	6	
	H.	5704436	1/1998	Smith et al.	173	6	
<i>W</i>	I.	5767399	6/1998	Smith et al.	702	10	
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	K.						
	L.						
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		DOCUMENT (Including Author, Title, Source, and Pertinent Pages)					DATE
<i>W</i>	M.	Joe Kelly, Jr., "Use break-Even Analysis to Optimize Bit Runs", pp. 75-79, World Oil					Nov. 1992
	N.	Geir Hareland and L.L. Hoberock, "Use of Drilling Parameters to Predict In-Situ Stress Bounds", pp.457-471, SPE/IADC 25727					Feb. 1993
	O.	J.P.R. Sparr and L.W. Ledgerwood, harvey Goodman, R.L. Graff and T.J. Moo, "Formation Compressive Strength Estimates for Predicting Drillability and PDC Bit Selection", pp. 569-578, SPE/IADC 29397, published Feb. 1995, Amsterdam, Netherlands					Published Feb. 1995
	P.	R.V. Barragan, O.L.A. Santos and E.E. Maidla, "Optimization of Multiple Bit Runs", pp. 579-589, SPE/IADC 37644					Mar. 4, 1977
	Q.	R.K. Bratli, G. Hareland, F. Stene, G.W. Dunsæd and G. Gjelstad, "Drilling Optimization Software Verified in the North Sea", 7 pages, SPE 39007					Aug. 1997
	R.	G. Gjelstad, G. Hareland, K.N. Nikolaisen and R.K. Bratli, "The Method of Reducing Drilling Costs More Than 50 Percent", 7 pages, SPE 47342					Jul. 1998
<i>W</i>	S.	M.B. Ziaja and J.C. Roegiers, "Lithology Diagnosis Based on the Measurements of Drilling Forces and Moments at the Bit", IADC/SPE 47799, pp. 185-194					Sep. 1998
EXAMINER <i>Dmg</i>					DATE CONSIDERED <i>1/21/2005</i>		
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<i>ll</i>	A.	5965810	10/1999	Holbrook	166	254		
<i>ll</i>	B.	6021859	2/2000	Tibbitts et al.	175	431		
<i>ll</i>	C.	6109368	8/2000	Goldman et al.	175	39		
<i>ll</i>	D.	5794720	8/18/98	Smith et al.	—	—		
<i>ll</i>	E.	6131673	10/17/00	Goldman et al.	—	—		
<i>ll</i>	F.	6408953	6/25/02	Goldman et al.	—	—		
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<i>ll</i>	M.	H. Xu, T. Hatakeyama, T. Yonezawa and A. Suzuki, "Evaluation of Bit Performance Using an Advanced Drilling-Test System", IADC/SPE 47809, pp. 247-252						Sep. 1998
<i>ll</i>	N.	H.I. Bilgesu, U. Altmis, S. Ameri, S. Mohaghegh and K. Aminian, "A New Approach to Predict Life Based on Tooth or Bearing Failures", pp. 253-257, SPE 51082						Nov. 1998
<i>ll</i>	O.	E.T. Koskie, Jr., P. Slagel and W. Lesso, Jr., "Monitoring MWD Torque Improved PDC Bit Penetration Rates", pp. 61-67, World Oil						1998
	P.							
	Q.							
	R.							
	S.							
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A	1209299	12/19/16	Hughes	--	--	12/30/16
A.	1263802	04/23/18	Reed	--	--	08/13/17
B.	1394769	10/25/21	Sorensen	--	--	05/18/20
B	3660649	5/72	Gilchrist et al.	235	193	09/28/70
C	3761701	9/73	Wilder et al.	235	193	07/14/71
C.	4056153	11/01/97	Miglierini	175	376	07/16/76
A.	4479176	10/84	Grimshaw	364	148	02/08/82
B.	4617825	10/1986	Ruhovets	73	152.05	09/12/85
C.	4646240	02/1987	Serra et al.	364	422	04/07/86

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	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
D.	0384734A	08/29/90	EP	E21B	10/16	X	
E.	2241266	08/28/91	GB	E21B	10/46	X	
D	2328966	3/10/99	GB	E21B	10/16	X	-
F.	2343905	5/24/00	GB	E21B	10/16	X	-

NON-PATENT DOCUMENTS

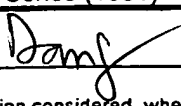
	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
G.	European Search Report for EP03021140.3; 6 pages	02/04/2004
H.	French Preliminary Report for application no. FR 0203948. 5pages	11/21/2003
I.	K.K. Millheim, "The Role of the Simulator in Drilling Operations", SPE Drilling Engineering	10/1986
J.	Dr. Alan J. Scott, "Online Animations of Time Evolving Physical Systems", Depart of Physics, University of Wisconsin-Stout	Printed 05/04/04
K.	G. Martin Milner and Glen Corser, "Data Processing and Interpretation While Drilling", AADE National Drilling Technical Conference	2001
L.	Jim O'Hare and Osarumwense O.A. Aigbekaen Jr., "Design Index: A Systematic Method of PDC Drill-Bit Selection", IADC World Drilling	2000
M.	J Booth and M.M. Cook, "Meeting Future Drilling Planning and Decision Support Requirements: A New Drilling Simulator", SPE/IADC Drilling Conference	2001
N.	P.R. Rampersad, G. Hareland and P. Boonyapaluk, "Drilling Optimization Using Drilling Data and Available Technology", Society of Petroleum Engineers, Inc.	1994
O.	Foucault, Hubert et al., "An Integrated Drilling Optimazation for Faster and Higher Improvements in Oseberg South", Halliburton Energy Services; Hydro, 8 pages.	2003

EXAMINER

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	A.	4718011	01/1988	Patterson, Jr.	364	422	11/24/86
	B.	4794534	12/88	Millheim	175	40	08/08/85
	A.	4794535	12/88	Gray et al.	364	420	08/18/86
	C.	4852399	08/89	Falconer	73	151.5	07/13/88
	D.	4876886	10/89	Bible et al.	73	151.5	04/04/88
	E.	4916616	04/1990	Freedman et al.	364	422	12/08/86
	F.	4926950	05/90	Zijsling	175	39	12/20/88
	G.	4928521	05/90	Jardine	73	152.43	03/27/89
	H.	5216612	06/1993	Cornett et al.	364	468	07/16/90
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	A.	2360304	9/19/01	GB	E21B	10/16	X -
	B.	2363144	12/12/01	GB	E21B	10/16	X -
	C.	2363145	12/12/01	GB	E21B	10/16	X -
	D.	2363146	12/12/01	GB	E21B	10/16	X -
NON-PATENT DOCUMENTS							
		DOCUMENT (Including Author, Title, Source, and Pertinent Pages)					DATE
	E.	W.W. Reynolds, "Economic Analysis of Drilling Plans and Contractors by Use of a Drilling Systems Approach", Journal of Petroleum Technology, XP-002261288, pages 787-793					07/1986
	F.	M.R. Fassihi et al., "Risk Management for the Development of an Offshore Prospect", SPE 52975, XP-002261289, pages 1-6					03/20/1999
	G.	I.C. Pallister et al., "Asset Optimization Using Multiple Realizations and Streamline Simulation", Society of Petroleum Engineers - SPE 59460					04/25/00
	H.	Tom H. Hill et al., "Drilling Optimization: Practice makes perfect", World Oil vol. 220, no. 4, XP-000831749, pages 63-64, 66, and 68.					04/1999
	I.	Ali G. Kadaster et al., "Drilling Time Analysis-A TQM Tool For Drilling in the '90s", Petroleum Engineer International vol. 65, no. 2, XP 000349995, pages 31-32, 35-38					02/1993
	J.	Wilson C. Chin, "Wave Propagation in Petroleum Engineering" (1994)					1994
	K.	Brochure entitled: "Twist & Shout", Smith International, Inc., (SB2255.1001), 4 pages					Printed 06/2004
	L.	Adam T. Bourgoyne Jr et. al., "Applied Drilling Engineering", Society of Petroleum Engineers Textbook Series (1991)					1991
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<i>copy</i> <i>copy</i> <i>copy</i> <i>copy</i> <i>copy</i> <i>copy</i> <i>copy</i> <i>copy</i>	A.	5239467	08/1993	Kelly et al.	364	421	02/19/92
	A.	5251286	10/1993	Wiener et al.	395	22	03/16/92
	B.	5334833	08/1994	Case et al.	250	270	06/14/91
	C.	5369570	11/1994	Parad	364	401	11/14/91
	D.	5416697	05/1995	Goodman	364	422	07/31/92
	E.	5461562	10/1995	Tabanou et al.	364	422	06/21/94
	F.	5539704	07/1996	Doyen et al.	367	73	06/23/95
	G.	5608162	03/04/97	Ho	73	152.48	07/13/95
	B.	5660239	08/1997	Mueller	175	61	09/27/93

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	C.	2365899	2/27/02	GB	E21B	10/16	X	-
	D.	2370059	6/19/02	GB	E21B	10/16	X	-
	E.	2370060	6/19/02	GB	E21B	10/16	X	-

NON-PATENT DOCUMENTS			
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<i>copy</i> <i>copy</i> <i>copy</i> <i>copy</i> <i>copy</i> <i>copy</i> <i>copy</i>	F.	J. P. Nguyen, "Oil and Gas Field Development Techniques: Drilling" (translation 1996, from French original 1993)	1996
	G.	"Making Hole", part of Rotary Drilling Series, edited by Charles Kirkley (1983)	1983
	H.	"Drilling Mud", part of Rotary Drilling Series, edited by Charles Kirkley (1984)	1984
	I.	H.G. Benson, "Rock Bit Design, Selection and Evaluation", presented at the spring meeting of the pacific coast district, American Petroleum Institute, Division of Production, Los Angeles, May, (1956)	05/1956
	J.	J.C. Estes, "Selecting the Proper Rotary Rock Bit", Journal of Petroleum Technology, Nov., (1971), pp1359-1367	11/1971
	K.	Sikarskie, et. al., "Penetration Problems in Rock Mechanics", American Society of Mechanical Engineers, Rock Mechanics Symposium, (1973)	1973
	L.	Dykstra, et. al., "Experimental Evaluations of Drill String Dynamics", Amoco Report Number SPE 28323, (1994)	1994
	M.	Kenner and Isbell, "Dynamic Analysis Reveals Stability of Roller Cone Rock Bits", SPE 28314, (1994)	1994

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<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> 2003 2002 2001 2000 1999 1998 1997 1996 </div>	A.	5845258	12/1998	Kennedy	705	8	06/16/95
	A.	5963910	10/1999	Ulwick	705	7	09/20/96
	B.	6026912	2/22/00	King et al.	-	-	--
	B.	6044327	03/28/00	Goldman	702	11	11/13/97
	C.	6052649	04/18/00	Goldman et al.	702	11	05/18/98
	D.	6155357	12/5/00	King et al.	-	-	--
	C.	6169967	01/02/01	Dahlem et al.	703	10	09/04/98
	E.	6233498	5/15/01	King et al.	-	-	--
F.	6276465	8/21/01	Cooley et al.	-	-	--	

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	H.	1654515	03/29/88	SU	E21B	10/16	X	
	I.	1691497	05/30/88	SU	E21B	10/16	X	

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PTO-1449 Information Disclosure Citation in an Application		Application No.		Applicant(s)	
		10/669,105		William A. Goldman et al.	
		Docket Number		Group Art Unit	Filing Date
		074263.0170		Unassigned	September 23, 2003

U.S. PATENT DOCUMENTS							
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
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	I.	6389360	5/02	Alft et al.	702	9	--
	A.	6424919	7/23/02	Moran et al.	-	-	--
	J.	6612382	09/02/03	King	175	40	03/28/01
	B.	2002/0120401	9/01	Macdonald et al.	702	6	--
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FOREIGN PATENT DOCUMENTS								
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NON-PATENT DOCUMENTS			
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	I.	Crain, E.R.; "The Log Analysis Handbook, Volume One: Quantative Log Analysis Methods", PennWell, Tulsa, OK	1986
	J.	Prammer, M.G. et al., "Measurements of Clay-Bound Water and Total Porosity by Magnetic Resonance Logging", SPE paper 36522	1996
	K.	Oort, Eric Van, "Physico-Chemical Stabilization of Shales", SPE paper 37623	1996
	L.	Smith, L. et al., "Successful Field Application of an Electro-Negative 'Coating' to Reduce Bit Balling Tendencies in Water Based Mud", SPE/IADC paper 35110	1996
	M.	Glover, et al., "New Advances and Applications of Combining Simulation and Optimization", Proc. Winter Simulation Conference, pp. 144-152	12/1996
	N.	Hill et al., "Intelligent Drilling System for Geological Sensing", Proc. Of the IEEE/RSJ Int. Conf. On Intelligent Robots and Systems, Vol. 1, pp. 495-501	07/1993
	O.	Hancke et al., "A Control System for Optimizing Deep Hole Drilling Conditions", Proc. IECON Inter. Conf. On Industrial Electronics, Control and Instrument", vol. 3, pp. 2279-2284.	11/1991
	P.	Murphy, Don; "Selecting the Right Rotary Bit is the Place to Smart Cutting Costs", The Oils & Gas Journal, pp. 88-92.	02/03/69
	Q.	Jackson, R.A.; "Cost/Foot: Key to Economic Selection of Rock Bits", World Oil, pp. 83-85.	06/1972
R.	Estes, Jack C.; "Guidelines for Selecting Rotary Insert Rock Bit", Petroleum Engineer, pp. 30-34.	09/1974	

EXAMINER <i>Dang</i>	DATE CONSIDERED <i>1/21/2005</i>
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

PTO-1449 Information Disclosure Citation in an Application		Application No. 10/669,105		Applicant(s) William A. Goldman et al.			
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U.S. PATENT DOCUMENTS							
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
<i>[Handwritten marks]</i>	A.	4096385	06/78	Marett	702	8	--
	B.	4903527	02/90	Herron	702	8	--
	C.	5205164	04/93	Steiger et al.	702	9	--
	D.	5330016	07/94	Paske et al.	-	-	--
	A.	2004/0059554	03/25/04	Goldman et al.	703	7	09/23/03
	B.						
FOREIGN PATENT DOCUMENTS							
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	E.						
NON-PATENT DOCUMENTS							
		DOCUMENT (Including Author, Title, Source, and Pertinent Pages)					DATE
<i>[Handwritten marks]</i>	F.	Chambers, Robert et al., "Drilling Man's Guide to Better Bit Selection", Petroleum Engineer, pp. 100-108.					06/1982
	G.	Novig, T., "Factors Affecting Rock Bit Selection", Oil Gas Magazine					04/1988
	H.	Soemodihardjo, W. et al., "Application of an Expert System to Rotary Drilling Bit Selection", 1 st Victorian Dep. Of Manufacturing Ind. Dev., pp. II-17 through II-40.					11/1991
	I.	Dfendiyev, G.M. et al., "The Optimum Decision in Cutting-Type Drilling Bits Selection with Regard to their Operating Conditions and the Vagueness of the Task Pose", Energy Sources, Vol. 13, pp. 243-250.					1991
	J.	"Advanced Bit Engineering, Selection Lowers Drilling Cost", Petroleum Engineer No. 9, Vol. 65, p. 3.					09/1993
	K.	Falcao, J.L. et al., "PDC Bit Selection through Cost Prediction Estimates Using Crossplots and Sonic Log Data", SPE/IADC 25733, pp. 525-535.					1993
	L.	Pessier, R.C. et al., "Different Shales Dictate Fundamentally Different Strategies in Hydraulics, Bit Selection, and Operating Practices", SPE 28322, pp. 307-318.					1994
	M.	Tewari, Shrikant, "Dull Bit Grading and Rock Strength Analysis Key to Bit Selection", Oil & Gas Journal, pp. 45-51.					12/05/94
		Hameed A. et al., "Deep Wells Bit Optimization", SPE/IADC 39269, pp. 197-203					1997
		Perrin, V.P. et al, "Drilling-Index-A New Approach to Bit Performance Evaluation", SPE/IADC 37595, pp. 199-205.					1997
		De Castro, F.J.N. et al., Evaluation of Drill Bit Performance Taking into Account the in Situ State of Stress", SPE International, pp. 1-8.					1997
		Fabian, Robert T., "In Situ Compressive Strength Analysis as an Aid in Fixed Cutter Bit Selection and Performance", ASME International, pp. 86-94.					1997
		Xu, H. et al., "A Method for Bit Selection y Modeling ROP and Bit-Life", The Petroleum Society, Paper 97-78, p. 1-8.					06/08/97
	Security DBS, "Design at the Customer Interface", brochure					1997	
EXAMINER <i>[Signature]</i>					DATE CONSIDERED <i>1/21/2005</i>		
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.							

PTO-1449 Information Disclosure Citation in an Application		Application No. 10/669,105 Docket Number 074263.0170		Applicant(s) William A. Goldman et al. Group Art Unit Unassigned Filing Date September 23, 2003			
U.S. PATENT DOCUMENTS							
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FOREIGN PATENT DOCUMENTS							
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	F.						
	G.						
NON-PATENT DOCUMENTS							
		DOCUMENT (Including Author, Title, Source, and Pertinent Pages)					DATE
	H.	Dekun, Ma et al., "Computer Simulation of the Interaction between Roller Bit and Rock", Proceedings of the International Meeting on Petroleum Engineering, Part 1 of 2; vol. 1, pp. 309-317; XP002266077					1995
	I.	Warren, T.M.; "Factors Affecting Torque for a Roller Cone Bit", JPT J PET Technol., vol. 36, no. 10, pp. 1500-1508; XP002266079					06/1989
	J.	Sheppard, M.C et al., "Forces at the Teeth of a Drilling Rollercone Bit: Theory and Experiment", Proceedings: 1988 SPE Annual Tehnical Conference and Exhibition; vol. Delta, pp. 253-260, XP002266080					10/02/1988
	K.	Steklyanov, A.V. et al., "Improving the Effectiveness of Drilling Tools", KhM-3 Oil Industry Machine Building, Moscow, pp. 1-35.					1991
	L.						
	M.						
	N.						
	O.						
	P.						
LITIGATION DOCUMENTS							
	Q.	Memorandum Opinion of Judge Davis, signed February 13, 2004, in the United States District Court for the Eastern District of Texas, Sherman Division, Civil Action No. 4-02CV269, Halliburton Energy Services, Inc. v. Smith International, Inc., 37 pages (including fax coversheet)					02/19/2004
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